**PEOPLE’S DEMOCRATIC REPUBLIC OF ALGERIA**

**MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH**

**UNIVERSITY M’HAMED BOUGARA OF BOUMERDES**



**F**aculty of Technology

**Doctoral Thesis**

Presented by:

**………………………………..**

Submitted for the Fulfilment of the Requirements of the **DOCTORAT-LMD** degree in

**Field:** ………………….

**Specialty:** …………………………….

……………….title……………………………..

**In front of a jury composed of**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pr.  |  |  |  |  President |
| Dr.  |  |  |  |  Supervisor  |
| Dr.  |  |  |  |  Examiner |
| Dr.  |  |  |  |  Examiner |
| Dr.  |  |  |  |  Examiner |

 Academic Year: 2023/20224